

Appl. No. 10/720,652
Response dated: July 7, 2006
Reply to Office action of May 09, 2006

REMARKS

In response to the Final Office action dated May 09, 2006, Applicants respectfully request reconsideration based on the above claim amendments and the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance.

Claims 1-26 are pending in the present Application. Claim 2 has been canceled and claims 4, 5, 7-11, 15, 16, 18-26 are withdrawn from consideration. Claims 1, 3, 6, 12-14 and 17 currently stand rejected. Claims 1, 3, 6, 12 and 14 have been amended leaving claims 1, 3, 6, 12-14 and 17 for examination upon entry of the present amendments.

Support for the claim amendments can at least be found in the specification, the figures, and the claims as originally filed. Particularly, support for amended Claims 1, 3, 6, 12 and 14 is at least found in the originally filed specification at page 7-8, and Figures 2-3B.

The Applicants submit that claims 1, 3, 6, 12-14 and 17 are in condition for allowance and request reconsideration and withdrawal of the outstanding rejections. No new matter has been entered.

Objections to the Drawings under 37 C.F.R. 1.83(a)

The Examiner objects to the drawings for failing to show every feature of the invention specified in the claims. This objection is respectfully traversed. The Examiner specifically states that the feature "wherein distances between adjacent two electrode terminals aligned in the second direction from respective adjacent columns are uniform" is not supported by the drawings.

However, as more clearly and distinctly pointed out by the new claim amendments, the feature "wherein distances between adjacent two electrode terminals *for each respective first, second, and third plurality of electrode terminals* aligned in the second direction from respective adjacent columns are uniform" is disclosed with reference to Figures 2-3B. Referring to Figure 2, it is shown that the distances between adjacent two electrode terminals from respective adjacent columns within each plurality of electrode terminals is uniform; for example the distances between data electrode terminals (covered by data line bumps B_D in Figure 2) are uniform from adjacent column to column. Accordingly, Applicants respectfully request that the objections to the drawings be withdrawn.

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Claim Rejections under 35 U.S.C. § 112

Claims 1 and 12 stand rejected under 35 U.S.C. § 112, first paragraph as failing to provide enablement for the feature "wherein distances between adjacent two electrode terminals aligned in the second direction from respective adjacent columns are uniform."

Applicants respectfully submit that in light of the new amendment the specification is fully enabling for the claimed feature "wherein distances between adjacent two electrode terminals for each respective first, second and third plurality of electrode terminals aligned in the second direction from respective adjacent columns are uniform." Figures 2-3B as discussed above, and the detailed description of the invention on pages 7-8, at least disclose the described feature.

Claim Rejections under 35 U.S.C. § 102

Claims 1 and 3 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Shibatani (U.S. Patent No. 6,147, 739, hereinafter "Shibatani"). The Applicants respectfully disagree. Claims 1 and 12 have been amended to particularly point out and clearly define that there are several separate regions having a plurality of rows and columns according to the present invention, which Shibatani does not possess.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Applicants have amended independent Claim 1 to recite, *inter alia*,

"a first, second, and third plurality of electrode terminals, each plurality of electrode terminals being linearly aligned in a plurality of columns along a first direction parallel to an edge line of a semiconductor substrate and linearly aligned in a plurality of rows along a second direction perpendicular to the first direction..."

Shibatani may be read as disclosing a circuit comprising a first plurality of electrode terminals linearly aligned in a plurality of columns along a first direction parallel to an edge line of a semiconductor substrate; namely the two columns P₅₀ on the left and right sides of the substrate as shown in Figure 2. However, Shibatani does not show a second or third plurality of

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electrode terminals according to the above claim, for example the signal electrodes Psi, disclosed in Shibatani do not disclose the feature of having a plurality of rows. Shibatani therefore cannot anticipate the claimed invention.

Additionally, Applicants have amended claim 1 to recite, *inter alia*,
"wherein distances between adjacent two electrode terminals for each respective first, second and third plurality of electrode terminals aligned in the second direction from respective adjacent columns are uniform."

Shibatani may be read as disclosing a circuit comprising a first plurality of electrode terminals wherein distances between adjacent two electrode terminals are uniform, namely the distance between the column Pso on the left and the column Pso on the right side of the substrate is uniform. However, Shibatani fails to disclose a second or third plurality of electrode terminals that displays a uniform distance in the second direction between respective adjacent columns. As stated above, because of the lack of a plurality of rows the signal electrode terminals Psi cannot be treated as a second plurality of electrode terminals; even if it were, it lacks any separation between the individual electrode terminals and therefore cannot have a uniform non-zero distance between adjacent terminals.

Thus, for all the reasons stated above, Shibatani does not disclose all of the limitations of amended claim 1 and similarly amended claim 12. Therefore, claims 1 and 12, including claims depending therefrom, i.e., claims 3, 6, 13, 14 and 17, define over Shibatani.

Accordingly, it is respectfully requested that the rejection of claims 1 and 3 under 35 U.S.C. § 102(b) be withdrawn.

Claim Rejections Under 35 U.S.C. § 103

Claims 6, 12-14 and 17 under 35 U.S.C. § 103(a) as being unpatentable over [Shibatani] for the reasons stated on pages 5-6 of the Final Office Action. Applicants respectfully traverse.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir.

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1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

As discussed above, Shibatani does not disclose at least "a first, second, and third plurality of electrode terminals, each plurality of electrode terminals being linearly aligned in a plurality of columns along a first direction parallel to an edge line of a semiconductor substrate and linearly aligned in a plurality of rows along a second direction perpendicular to the first direction... wherein distances between adjacent two electrode terminals for each respective first, second and third plurality of electrode terminals aligned in the second direction from respective adjacent columns are uniform." with respect to amended Claim 1. This same limitation is also recited in amended Claim 12. Thus, Shibatani, does not disclose *all of the limitations* of amended Claim 12. Accordingly, *prima facie* obviousness does not exist regarding amended Claim 12 with respect to Shibatani.

Not only does Shibatani fail to disclose all of the limitations of amended Claims 1 and 12, it also fails to teach or suggest them. Clearly, one of ordinary skill at the time of Applicants' invention would not have a motivation to modify, Shibatani nor a reasonable likelihood of success in forming the claimed invention by modifying Shibatani. Thus, here again, *prima facie* obviousness does not exist. *Id.*

Therefore, the requirements of *prime facie* obviousness do not exist regarding amended Claim 12 with respect to Shibatani. Applicants respectfully submit that Claim 12 is not further rejected or objected and is thus allowable. Claims 13, 14 and 17 depend from Claim 12 and are correspondingly allowable as depending upon allowable Claim 12. Claim 6 depends from allowable Claim 1 and is correspondingly allowable. Reconsideration and allowance of Claims 6, 12-14 and 17 is respectfully requested.

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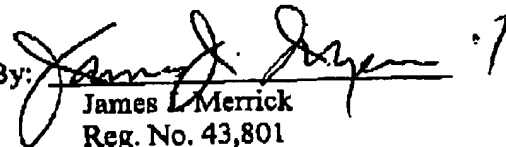
Conclusion

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

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